



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

November 1, 2011

Mr. William Weaver
Regional Manager, Air Quality Program
Pennsylvania Department of Environmental Protection
South Central Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110

RE: Proposed Plan Approval - York Plant Holding, LLC

Dear Mr. Weaver:

Thank you for the opportunity to review the Commonwealth of Pennsylvania's proposed Plan Approval for York Plant Holding, LLC (YPH) new electric generation project using two simple cycle turbines in York County, Pennsylvania. Based on our evaluation, we have identified several comments that are included in the attachment. We provide these comments to help ensure that the project meets all federal requirements, that the permit provides all necessary information so that it is readily accessible to the public, and that the record provides adequate support for the permit decision. We look forward to working with you in addressing all the issues raised.

If you have any questions, please do not hesitate to contact me at 215-814-2173 or Mr. Himanshu Vyas of my staff at 215-814-2112.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Kathleen Cox", is positioned above the printed name.

Kathleen Cox
Associate Director,
Office of Permits and Air Toxics (3AP10)

Ec: Dan Husted, P.E. (PADEP)

Enclosure



Enclosure

Description of Project:

YPH is an existing PSD major facility located in York County, Pennsylvania. The units currently on site include four natural gas-fired turbines in combined cycle, each with a heat input rate of 98.6 MMBTU/hr and a generating capacity of 8.3MW. Being a natural gas electric generating facility with more than 250 MMBTU/hr of heat input, it is one of the 28 source categories listed in 52.21(b)(1)(i)(a). The proposed project is the installation of two new simple cycle turbines with combined gross output of between 82.6 MW and 123 MW, depending on which turbine model is selected. The proposed project will trigger PSD review for emissions of greenhouse gases (GHG) and PM/PM10. Emissions controls include water injection and selective catalytic reduction for NOx control and catalytic oxidation for CO control.

Comments on permit and technical review memo:

1. The permit technical review memo (TRM) provides the BACT analysis for the proposed project, and states that the applicant wants to reserve the right to purchase any one of three turbines, viz. Rolls Royce Trent 60 (about 61.5MW each); Pratt & Whitney FT8 (49MW each); or GE LM6000 (47MW each). The BACT limits in the proposed Plan Approval are based on data from the GE LM6000, which the TRM asserts is the most efficient of the three turbine options. However, the TRM does not provide the heat rate or energy efficiency of the other mentioned turbine models, nor does it explain how the heat rate of the GE LM6000 units compares to other similar type of turbine models. The permit record should be able to show that the most efficient turbine model is chosen for the proposed project, or it should justify why a turbine with a lower efficiency was selected. Please include this additional information in the final record the Plan Approval.
2. As noted above, the BACT limits in the proposed Plan Approval are based on data from the GE LM6000. Since the proposed Plan Approval allows the applicant to potentially select a less efficient turbine model, please explain how the emission limits in the final Plan Approval will be adjusted to account for a different turbine selection.

Comments on the Air Quality Analysis:

3. The modeling analysis indicated that the proposed facility will take fuel restrictions based on time of day to ensure that it remains below the modeled PM10 significant impact levels. (i.e., oil or natural gas will be burned between the hours of 6:00 AM and 8:00 PM, natural gas only between the hours of 8:00 PM to 6:00 AM). Please ensure that the final Plan Approval reflects the fuel use restrictions used in the modeling analysis.
4. The modeling analysis summary document references a Table 2, which supposedly includes a summary of all criteria pollutant emissions from the facility. However, this data is missing in Table 2. PADEP should provide this summary of the proposed facility's criteria pollutant summary for inclusion in the public record for this plan approval.

